# New Addition Reactions. (III) : Addition of Aliphatic Epoxides to Nitriles

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## New Addition Reactions. (II)

### Addition of Aliphatic Epoxides to Schiff Bases

Ryohei ODA, Masaya OKANO, Shohei TOKIURA, and Akira MIYASU

*Bulletin of the Chemical Society of Japan*, **35**, 1216 (1962)

By the stannic chloride-catalyzed addition of aliphatic epoxides to Schiff bases, various oxazolidines have been obtained. For expample, the reaction of propylene oxide with N-t-butylazomethine and benzalaniline afforded 3-t-butyl-5-methyloxazolidine and 5-methyl-2, 3-diphenyloxazolidine in 24% and 30% yieeds, respectively. The use of boron trifluoride as a catalyst resulted in a lower yield of the desired adduct.

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### Addition of Aliphatic Epoxides to Nitriles

Ryohei ODA, Masaya OKANO, Shohei TOKIURA, and Fujio MISUMI

*Bulletin of the Chemical Society of Japan*, **35**, 1219 (1962)

Upon treatment of aliphatic epoxides with aliphatic or aromatic nitriles in cold concentrated sulfuric acid, the formation of the cyclic adducts, 2, 4- and/or 2, 5-disubstituted 2-oxazolines, has been observed in low yields (below 20%). The reaction of caetonitrile with propylene oxide gave a mixture of 2, 4- and 2, 5-dimethyl-2-oxazoline (70 : 30), while the reaction with epichlorohydrin afforded only 4- (or 5-) chloromethyl-2-methyl-2-oxazoline.

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## Partial Asymmetric Synthesis in the Conjugate Addition of a Grignard Reagent to an $\alpha, \beta$-Unsaturated Ester

Yuzo INOUYE and H. M. WALBORSKY

*Journal of Organic Chemistry*, **27**, 2706 (1962)

In the series of our asymmetric synthesis studies, a successful asymmetric synthesis in a Diels-Alder condensation has recently been reported (H. M. Walborsky, L. Barash and T. C. Davis, *J. Org. Chem.*, **26**, 4778 (1961)) and the resemblance in mechanism suggested the possibility of asymmetric synthesis in the conjugate addition of a Grignard reagent to an $\alpha, \beta$-unsaturated ester.

The addition of phenylmagnesium bromide to (−)-menthyl crotonate resulted